JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Vol. 337 Nos. 1 and 2 10 OCTOBER 1992

CONTENTS

Analysis of molecular polarization and interaction in adsorbed monolayers at electrodes. Part 1. Interaction between adsorbed dipoles
S.L. Marshall (Nedlands, WA, Australia) and B.E. Conway (Ottawa, Canada) 1

Analysis of molecular polarization and interaction in adsorbed monolayers at electrodes. Part 2. Surface solvation energy of adsorbed charges
S.L. Marshall (Nedlands, WA, Australia) and B.E. Conway (Ottawa, Canada) 19

Analysis of molecular polarization and interaction in adsorbed monolayers of electrodes. Part 3. Ionic adsorption isotherm with mean field treatment of interactions involving ions and dipoles
S.L. Marshall (Nedlands, WA, Australia) and B.E. Conway (Ottawa, Canada) 45

Analysis of molecular polarization and interaction in adsorbed monolayers at electrodes. Part 4. Madelung constants for hexagonal lattices of adsorbed ions and dipoles
S.L. Marshall (Nedlands, WA, Australia) and B.E. Conway (Ottawa, Canada) 67

Theory of steady-state voltammetry without supporting electrolyte
K.B. Oldham (Peterborough, Canada) 91

An electrical model circuit that reproduces the behaviour of conducting polymer electrodes in electrolyte solutions
S. Fletcher (Port Melbourne, Victoria, Australia) 127

Charging of the Pd/^{n}H system: role of the interphase
S. Szpak, P.A. Mosier-Boss, S.R. Scharber (San Diego CA, USA) and J.J. Smith (Washington DC, USA) 147

Tin(IV) oxide grafted on a silica gel surface as a conducting substrate base for nickel hexacyanoferrate
G.A.P. Zaldivar and Y. Gushikem (São Paulo, Brazil) 165

Some aspects of the mechanism of the reduction of the antineoplastic agent cytarabine on a mercury electrode
C. Teijeiro and D. Marin (Madrid, Spain) 175

Photoelectrochemical processes at an n-type CdS:I single-crystal electrode as studied by photothermal laser beam deflection: energy conversion efficiencies and Peltier heats
P. Grunow, J. Rappich and J.K. Dohrmann (Berlin, Germany) 181

Study of the electrochemical behaviour of gold (111) vicinal faces situated on the [01$\bar{1}$] zone in aqueous solutions
J. Lecoeur, J.P. Bellier and C. Koehler (Meudon, France) 197

Real time scanning tunneling microscopy imaging of Sn electrodeposition on n-GaAs
S. Eriksson, P. Carlsson, B. Holmström (Göteborg, Sweden) and K. Uosaki (Sapporo, Japan) 217

Incorporation of anionic species in organoclay-modified electrodes
P. Falaras and D. Petridis (Paraskevi Attikis, Greece) 229

Methanol oxidation on modified iridium electrodes
M.S. Ureta-Zañartu, P. Bravo and J.H. Zagal (Santiago, Chile) 241

Towards mediator design: characterization of tris-(4,4′-substituted-2,2′-bipyridine) complexes of iron(II), ruthenium(II) and osmium(II) as mediators for glucose oxidase of *Aspergillus niger* and other redox proteins
S.M. Zakeeruddin, D.M. Fraser, M.-K. Nazeeruddin and M. Grätzel (Lausanne, Switzerland) 253

Electrochemical preparation and behaviour of poly{pyrrole-[Ru(trpy)(bpy)(OH_2)]$^{2+}$} (trpy = 2,2′:6′,2″-terpyridine) (bpy = 2,2′-bipyridine) films. Application to the electrocatalytic oxidation of alcohols
W.F. De Giovani and A. Deronzier (Grenoble, France) 285

Simulation of time-dependent processes at redox polymer electrodes
E. Deiss, O. Haas (Villigen, Switzerland) and C. Daul (Fribourg, Switzerland) 299

Electrochemical properties of solutions of $CrCl_2$ and $CrCl_3$ in molten alkali chlorides
F. Lantelme, K. Benslimane and M. Chemla (Paris, France) 325

Short communications

Investigation of *o*-nitrophenol reduction at DME in the presence of ammonia
M. Przegalinski, B. Senczyna and A. Persona (Lublin, Poland) 337

Temperature dependence of the sensitivity of platinized gas-diffusion electrodes towards ethanol and acetone
H. Huck (Freiburg, Germany) 343

Laser Raman spectroscopy of a Langmuir–Blodgett film of 10,12-tricosadiynoic acid
K. Azumi (Sapporo, Japan), I. Takeda (Kawasaki, Japan), T. Ohtsuka (Nagoya, Japan) and N. Sato (Sapporo, Japan) 351

Preliminary notes

Oscillatory phenomena in oxygen and hydrogen peroxide reduction on the Au(100) electrode surface in alkaline solutions
S. Štrbac and R.R. Adžić (Belgrade, Yugoslavia) 355

New observations in the field of the electrochemistry of technetium and rhenium: electrocatalytic reduction of ClO_4^- ions at electrosorbed and electrodeposited Tc and Re layers in acid medium
G. Horányi, I. Bakos, S. Szabó and E.M. Rizmayer (Budapest, Hungary) 365

On the one-electron redox process of 18-molybdo-disulfate(VI) with the Dawson structure
S. Himeno, T. Osakai, A. Saito, K. Maeda (Kobe, Japan) and T. Hori (Kyoto, Japan) 371

Book reviews 375

Author index 379

Subject index 380